Title (en)

MAGNESIUM-BASED ALLOY AND USE OF SAME IN THE PRODUCTION OF ELECTRODES AND THE ELECTROCHEMICAL SYNTHESIS OF STRUVITE

Title (de)

MAGNESIUMBASIERTE LEGIERUNG UND VERWENDUNG DAVON BEI DER HERSTELLUNG VON ELEKTRODEN UND DER ELEKTROCHEMISCHEN SYNTHESE VON STRUVIT

Title (fr)

ALLIAGE À BASE DE MAGNÉSIUM ET SON UTILISATION DANS LA FABRICATION D'ÉLECTRODES ET LA SYNTHÈSE ELECTROCHIMIQUE DE LA STRUVITE

Publication

EP 3452637 A4 20191120 (FR)

Application

EP 17792331 A 20170503

Priority

- CA 2928823 A 20160504
- CA 2017050537 W 20170503

Abstract (en)

[origin: CA3022926A1] A novel magnesium-based alloy is described. The alloy is particularly suitable for the construction of electrodes, especially anodes, that can be used for an electrochemical process, such as the synthesis of struvite. The magnesium-based alloy is an AZXY alloy in which A is aluminium and Z is zinc, X represents the content, expressed in wt.%, of the first element, and Y the content, expressed in wt.%, of the second element. The AZXY alloy according to the invention has 2% = X = 4% and 0.5% = Y = 2%, and an iron (Fe) content of less than 0.005%, and preferably less than 0.003%. The anodes constituted by this novel alloy have a much slower corrosion speed and improved performances compared to existing anodes. An electrode cartridge comprising said alloy and suitable for being inserted into an electrolytic reactor so as to form, once assembled, an electrocoagulation unit, is also described.

IPC 8 full level

C25B 11/04 (2006.01); **C02F 1/461** (2006.01); **C02F 1/463** (2006.01); **C22C 23/00** (2006.01); **C22C 23/02** (2006.01); **C25B 9/12** (2006.01); **C25B 11/02** (2006.01)

CPC (source: EP US)

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- See references of WO 2017190240A1

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DOCDB simple family (application)

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